

Sustainable food house area policy to increase food security in the vulnerable area



 Faza Dhora Nailufar ^{(a)*}  Novy Setia Yunas ^(b)  M. Alexander Mujiburrohmah ^(c)

^(a) Assistant Professor, NIPA School of Administration, Jakarta, Indonesia

^(b,c) Assistant Professor, Department of Political Science, Faculty of Social and Political Science, University of Brawijaya, Malang, Indonesia

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ABSTRACT

One of the important justifications for the development of the Sustainable Food House Area or in Indonesia called Kawasan Rumah Pangan Lestari (KRPL) is national food security must begin with food security at the household level. Until now, most papers about KRPL have only addressed the impact of KRPL in part or in groups, but this study provides detailed explanation of the effectiveness of some KRPLs implantation, allowing broad generalizations to be reached about the main consequences. The location is in three east java districts with leading KRPL practices. The data was obtained by in-depth interviews to managers, local government and affected communities. Researchers also observed the practice of KRPL in the field to complete the data. As a result, KRPL policy has at least some good impacts, such as the existence of KRPL can reduce household spending due to reduce budget for food shopping and KRPL can stimulate the growth of productive economic enterprises in rural areas. And other important thing is KRPL can be a means of sharing and control between villagers and the village government.

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Introduction

Indonesia is an agricultural country with a wealth of natural and human resource potential. The availability of this abundant potential is initial capital and potential provision to support national development in all fields. The essence of the national development is the development of Indonesian people as a whole and the development of Indonesian society as a whole, including development in the agricultural sector as an effort to realize national food security. Limitations regarding food security based on Law No. 18 of 2012 mention food as the most important basic human need and its fulfillment is part of the human rights of every Indonesian person. Food must always be available in sufficient quantities, safe, high quality, nutritious, and varied and it does not conflict with the community's religion, beliefs, or culture.

One of the most important aspects of agricultural development in Indonesia is food security. This is due to the fact that Indonesia has a huge population, which necessitates appropriate food supply from agricultural products. The majority of Indonesians eat rice as their main source of nutrition. Rice purchases continue to account for a sizable portion of household consumption. Low-income families reliance on rice is increasing because low-income families will generally use their income to buy their basic needs, namely food.

Food insecurity is the opposite of food security. It refers to the situation of food insufficiency experienced by regions, communities, or households at specific times in order to fulfill physiological demand criteria for growth and public health. According to the Food Security Service of East Java Province's 2018 Food Vulnerability and Vulnerability Map, there are no longer any locations in East Java that are marked red (classified as food insecurity priorities 1 and 2). The majority of them are already in a light and dark green position (priority 5 and 6). This data differs significantly from 2009, when there were still more than 8 districts with red zones, both

* Corresponding author. ORCID ID: 0000-0003-1161-8685

priority 1 and 2. The KRPL (Sustainable Food House Area) program is one of the projects that has been shown to have a substantial influence on changing the color of the zone, which also signifies a reduction in the number of people who feel food insecure. This paper will discuss the implementation of the KRPL (Sustainable Food House Area) program which has proven successful in reducing the level of food insecurity in East Java. The study was conducted in 3 districts that have good and integrated KRPL management.

Theoretical and Conceptual Background

The Sustainable Food House area is an activity carried out by community groups who jointly cultivate yards as a sustainable food source to fulfill nutritional needs. The purpose of this program is to oversee the national food security program which must begin from food security at the household level. This KRPL operates by utilizing the yard of each house with various food crops, vegetable crops, fruit crops, biopharmaceutical plants, as well as livestock and fish. The results of this KRPL can meet the food and nutritional needs of households, and, besides that, it also has the potential to increase the household's income. It must be managed by a good system. There are several basic principles of Sustainable Food House Areas (KRPL), such as :

- i. *Utilization of environmentally friendly yards designed for food security and self-sufficiency;*
- ii. *Food diversification based on local resources;*
- iii. *Conservation of food genetic resources (plants, livestock, fish);*
- iv. *Preserving its sustainability through village nurseries towards*
- v. *Increasing community income and welfare.*

The main target of this program is women, because women are considered to be in charge of family food security. This program was launched nationally for the first time in 2010 and began to be implemented in Jelok Hamlet, Kayen Village, Pacitan District, Pacitan Regency. The KRPL program was a priority program in 2010-2014 RPJM, which focused on increasing food availability and accelerating food diversification.

At the initial stage, this KRPL only targeted the planting of various kinds of plants that could be used as food ingredients, such as tubers as a staple food substitute for rice, vegetables, fruits and medicinal plants. However, in its development, KRPL also accommodates the provision of side dishes, such as fish cultivation and poultry KRPL, on the other hand, accommodates the provision of side dishes, such as fish cultivation and poultry, in its expansion. It is hoped that KRPL will provide all aspects of society nutrition. Until 2018, KRPL had been implemented at almost 23,000 points with the value of saving expenditure per household equivalent to 750,000-1.2 million per month.

This study uses descriptive research methodologies and a qualitative approach. According to Creswell, qualitative research is heavily reliant on data from objects/participants. It has a broad scope, generic questions, data collection (which is primarily made up of words/texts received from participants), and an in-depth analysis procedure. So, the author can more easily describe the phenomena that exist in the field of natural and human engineering, which pays more attention to the characteristics, quality, and interrelationships between activities. To collect data, researchers used instruments such as in-depth interviews with several informants determined by purposive sampling techniques and field observations which were analyzed using non-statistical methods in accordance with the nature of descriptive research methods, which require researchers to make systematic, factual, and detailed descriptions. This research was conducted in 3 (three) districts in East Java, namely Tulungagung, Magetan and Ngawi districts.

Food Security and Food Insecurity

Around the 1980s, the notion of food security became generally known, replacing the notion of food policy, which had been developed in the early 1970s when the world was beset by a food crisis. The concept of food security has evolved and changed over time. According to Hanani (2009), the results of a literature study undertaken by IFPRI (1999) found 200 definitions and 450 indicators of food security. Food security, according to USAID (1992), is a state in which all people have physical and economic access to their consumption needs for a healthy and productive existence at all times. Meanwhile, FAO (1997) defines it as a situation in which all households have physical and economic access to food for all family members and are not at risk of losing both accesses.

Indonesian regulations, through Law no. 7 of 1996, define food security as a condition of providing food for households. This condition can be reflected in the availability of sufficient food, both in quantity and quality, safe, equitable, and affordable. Sufficient food availability covers all food, including food from plants, livestock, and fish in accordance with the composition of 4 Healthy 5 Perfect. Safe conditions mean being free from contamination of biological substances, chemicals, and other objects that can interfere with harm, and endanger human health, and in accordance with religious principles. Equitable means that the availability of food must be evenly distributed throughout the country so that the purchasing power of the people can afford it.

The scope and definition of the term have been broadened. Food security is concerned not only with the availability of food for people, but also with the availability of food for the entire country. Food requirements are also expanded to ensure that they are not only safe, equitable, and affordable, but also maintain quality, variety, and nutrition, as well as not conflict with the community's religion, beliefs, or culture, so that they can live healthy, active, and productive lives in the long run. The importance of self-sufficiency in achieving food sovereignty is emphasized in this new legislation.

The right of the state and nation to independently choose food policies that guarantee the right to food for the people, as well as the right of the community to decide on a food system that is in conformity with the potential of local resources, is defined as food sovereignty. Meanwhile, food independence refers to a state's or nation's ability to produce a variety of foods from within the country, ensuring the fulfillment of sufficient food demands at the individual level through the dignified use of natural, human, social, economic, and local wisdom resources.

Meanwhile, food insecurity is the condition of an area or area, community or household that does not have physical (availability) and economic access (purchasing power) to obtain sufficient food in quantity, quality, variety and safety to meet the standard physiological needs for growth and development of health.

KRPL's Implementation in East Java

One of the strategies of the East Java government to improve community food availability is through the application of the concept of the Sustainable Food House Area (KRPL). There is one KRPL in Tulungagung Regency that serves as a model for KRPLs both inside and outside the Tulungagung Regency. The KRPL is the Mangosteen KRPL, which is located in the village of Sumberdadi, Sumbergempol District. This KRPL was established in 2012 at the initiative of the East Java Provincial Government. The Manggis KRPL initially contained 30 members, but now it has grown to 50 members.

The main activities of the Mangosteen KRPL include planting food, vegetables and fruits; processed food production; fish farming and supplying organic fruit and vegetables to supermarkets in Tulungagung Regency. Processed food, such as vegetable pudding, spinach and papaya. KRPL Mangosteen is considered successful because it has fulfilled the five basic principles of KRPL. KRPL Mangosteen has utilized the yard of the house as a space to produce food crops, vegetables and fruits. Most of the residents' houses in Sumberdadi Village have a large yard on the front, side or back of the house. Larger yards are usually added to raise catfish. However, only a small number of KRPL Manggis members have catfish ponds, because managing crops and livestock requires a lot of attention.

KRPL Manggis has been able to handle local resources such as human resources and food resources well, allowing for food diversification. Housewives who do not work can be mobilized by KRPL Mangosteen to engage in good and productive activities. By utilizing the yard space of the house, the moms were originally educated with basic farming knowledge. According to the results of interviews conducted with Mrs. Sri, Chair of the Mangosteen KRPL Group, this activity necessitates patience, persistence, skills, and consistency on the part of members in order to advance in accordance with the government-designed KRPL objectives. KRPL Mangosteen also provides vegetables that are difficult to find such as red spinach.

Mangosteen KRPL has a systematic management system, so that it can increase income for members and the surrounding community. Every resident can plant various vegetables, fruits and livestock in the yard area of the house. Plants are usually planted 3 times a week, and harvested once a month. The harvest period for vegetables and fruit varies. Once a week, various crops that have been harvested are collected together at the production/packing site. They have been ordered by the offices or the district government in Tulungagung Regency to be used as typical souvenirs of Tulungagung Regency. The advantages of KRPL Mangosteen vegetables and fruits are that they are grown organically without chemicals. When pests attack plants, what is done is to take out the insects one by one (farmers). In order to stay healthy, it is vital to maintain the quality of vegetables and fruits.

In addition to food distribution, KRPL Mangosteen also provides plant seeds from existing plant products. The proceeds from the sale of food crops and seeds are then distributed to members once a month. The income earned by members varies depending on the number of vegetables or fruits collected each week. The average income earned is 1,000,000/member. KRPL Mangosteen's movement is supported by the village through capital assistance provided by the Sumberdadi Village Women's Cooperative. The Tulungagung District Government is also active in assisting the availability of plant seeds and fish seeds. In addition, KRPL Mangosteen is also a place of learning for several educational institutions such as University of Brawijaya of Malang, Agricultural Technology High School of Malang, Agricultural Extension School of Tulungagung, and State Institute of Islam of Tulungagung. KRPL Manggis also won 3rd place as the Best KRPL in East Java and is often a speaker at agricultural development seminars inside and outside Tulungagung Regency.

Although the Mangosteen KRPL has the potential to be successful, it faces several obstacles in its implementation, including: Mangosteen KRPL members must have the desire, willingness, and patience to manage a variety of plants and fruits. Because members' spirits fluctuate, it has an impact on the amount of crops produced. In terms of plant care, namely when attacked by pests, members may not use chemicals to maintain the quality of plants and organic fruit, so KRPL members must be patient in taking the pests one by one. In terms of distribution of the results of KRPL, it is less extensive because until now it has only been able to be distributed within Tulungagung Regency, due to lack of marketing outside Tulungagung Regency. In addition to these challenges, the existence of the Mangosteen KRPL not only has economic benefits but also in meeting the food and nutritional needs of the members of the KRPL. If at first the members and families only consumed rice with chicken and meat as side dishes, now they can consume various food menus such as vegetables from their crops. The nutritional quality of the plant is also guaranteed because the members manage and care for the plant organically.

The existence of the Sustainable Food House Area (KRPL) in Magetan Regency was initiated from 2012 until now. Based on data from the Food Security Agency, there are almost 150 Sustainable Food House Areas (KRPL) which are financed with APBN funds. One of the most innovative Sustainable Food House Areas (KRPL) in Magetan Regency is the Mulia Sustainable Food House Area (KRPL) in Karangrejo Village. The KRPL, which was coordinated by Ms. Khusnul Khotimah, was able to provide seeds for other KRPLs through the available nursery in line with the functions performed. Because KRPL Mulia Karangrejo produces a large volume of seeds, the direct impact of seed production and yards planted with various types of food crops on the community's economy is enormous. Not only that, the existence of KRPL also has more or less an effect on people's consumption patterns. Through the existing food diversification efforts, the community then began to take advantage of alternative food plants in their yards. Despite the findings in the field, the Mulia Karangrejo KRPL in the past year has been hampered by seeds that are attacked by fungal diseases so that not a few, but a few seeds are damaged. However, the implementation of other activities such as nutrition counseling and food diversification to KRPL members is still running with quite encouraging progress.

Overall, KRPL has a significant impact on increasing energy consumption, increasing protein consumption, changes in food consumption patterns and food expectations patterns (PPH). The most important thing for households is that the existence of KRPL reduces spending on food consumption, the largest food group expenditures are vegetables, tubers, and livestock products (chicken eggs) and fish (catfish, tilapia and *mujair*).

Another quite innovative Sustainable Food House (KRPL) area in Magetan Regency is the Sekar Arum in Panekan Village. The KRPL, coordinated by Mrs. Sumartinah, has been able to provide seeds for other KRPLs through the available nursery in accordance with the functions performed. Because KRPL Sekar Arum, Panekan Village produces a large volume of seeds, the outcomes of the seed production have a direct impact on the community's economy. Not only that, but the existence of KRPL has a significant impact on people's purchasing habits. The neighborhood began to use alternative food plants in their yards as a result of the existing food diversification activities.

As one of the regions in East Java, it is both a regional and national food buffer. Surplus food commodities (rice) are mostly used to meet food needs in other regencies. In addition to national food reserves, Magetan Regency is required to conduct studies, formulate policies and develop food security, implemented in the form of several action programs through the Food Security Agency. On a macro level, food policy in Magetan Regency certainly focuses on pro poor growth, well balanced and suitable and able to increase food security. In this case, to build food self-sufficiency, an integrated food agro-industry development policy is also needed from upstream to downstream, among others through the acceleration of mastery of science and technology (science and technology), including biotechnology and genetic engineering in the food sector which is expected to produce increased food products and highly competitive. In the current world food crisis, it is necessary to pay attention to the positive impacts for Indonesia, including the increase in foreign exchange from the export of food products with the increasing prices of world food products.

The food crisis has two dimensions for Indonesia: growing food costs necessitate a better awareness of Indonesia's food needs, but rising food prices also give a chance for Indonesia to generate more foreign cash. In this situation, the government must meet two requirements. First, farmers' rights to access and control various productive resources are guaranteed, allowing them to meet their food needs autonomously and sustainably. Second, ensure that every community has the right to decide its own food production, distribution, and consumption policies at the local level, in accordance with its ecological, social, economic, and cultural conditions.

Meanwhile, Ngawi Regency has a significant agricultural area and the majority of the population lives in rural regions, food and nutrition security is a top priority in economic development. The success of food and nutrition security in Ngawi Regency as a food surplus area has become a model for food and nutrition security at both the regional and national levels. In the dynamics of socio-political life, food insecurity is a very delicate topic. The development of food and nutrition security in Ngawi Regency as a whole in each sector can be carried out effectively if it has a clear direction and its performance is measured. Programs in the context of developing food and nutrition security must be integrated, measurable and sustainable¹⁵.

Ngawi Regency is one of food production center in East Java Province, particularly for rice commodities, in fact, it is a Regency that contributes a significant amount to East Java's food supply. Therefore, Ngawi Regency is one of the most important food supply hubs in the region and nationwide. Ngawi contributed the most to the contribution of vegetable food in East Java, with 6.20 percent for secondary crops, particularly peanuts, and rice coming in second with 5.96 percent. With the exception of meat commodities, which can contribute 3.6 percent, Ngawi Regency has not been able to contribute much to animal food.

Until now, not all of the food needs in Ngawi Regency can be met from domestic potential, especially for animal food commodities, such as eggs and milk, which are still experiencing a deficit. Meanwhile, there was a surplus of vegetable food commodities such as rice, corn, cassava, and sweet potatoes. In Ngawi Regency, food surpluses are maintained not only by adequate natural resources, but also by the potential of human resources and the support of improved economic infrastructure. Ngawi Regency is a source of other food supplies from livestock and fish, including meat, eggs, milk, and fish, in addition to increasing the availability and consumption of key food commodities such as rice, corn, soybeans, nuts, and tubers.

In accordance with the seasonal nature of agricultural production, the availability of food in Ngawi Regency is fluctuating. As a result of this situation, the food balance for rice commodities resulted in a very large surplus during the harvest season. Except for green beans, cassava, and milk, this situation occurs with almost all commodities where there is a surplus.

According to FAO regulations, the availability of food energy is at least 2,200 Kcal/capita/day, and protein is 57 grams/capita/day. The situation in Ngawi Regency substantially exceeds these levels. Food availability in Ngawi Regency is currently 7,818.15 kcal/capita/day, while protein availability is 183.24 g/capita/day, which is higher than the availability in East Java Province, which is 5,812 kcal/capita/day and 115 grams/capita/day.

To ensure food availability for the community, the government has established development priorities at both the national and provincial levels, as stated in the 2014-2019 RPJMN through nine development agendas (Nawa Cita) and at the regional level the 2013-2018 RPJMD of East Java Province.

Through the economic development agenda, the Ngawi Regency government continues to strive to increase food production through various priority activities. Rice production in Ngawi Regency in 2016 was 749,092 tons and decreased to 738,306 tons in 2017, while corn production in 2016 was 141,922 tons and increased to 169,112 tons in 2017. This food production has an impact on the level of calorie consumption of Ngawi Regency residents. In 2013, the energy consumption/calories of the people of Ngawi Regency was 1,985.7 kcal/capita/day, which slightly increased in 2014 to 1,985.9 kcal/capita/day.

The commitment and seriousness of Ngawi Regency as one of East Java's food barns appears to be reflected in a number of ways, one of which is an increase in the rice production aim from 800 thousand tons per year to 950 thousand tons per year. To realize it, The Ngawi Regency Government employs a variety of strategies. One of them is the use of organic fertilizers as a step to intensify agriculture in Ngawi Regency. By utilizing organic fertilizers, Ngawi agriculture is projected to produce good quality rice with no residue by using organic fertilizers. The Ngawi Regency government takes actual steps to achieve this goal by working with diverse communities and networks that are members of the Ngawi Regency Organic Fertilizer Maker and User Network (JP4O).

The contribution of the Ngawi Organic Center Community (KNOC) in the development of organic rice growing in Ngawi Regency can not be separated. KNOC is a community organization that evolves into a community of organic rice farmers, eventually forming a cluster or group/community of united organic rice farmers, which is also designated as the hub of organic rice production in Ngawi Regency by the Ngawi Regency Government. The establishment of KNOC also demonstrates that the development of an agricultural innovation system is dependent on the collaboration of a variety of stakeholders, including universities, Indonesian Institutes of Science, and the government.

The Ngawi Organic Center (KNOC) community, located in Guyung Village, Gerih District, is also developing an integrated farming system. An integrated farming system is a modern agricultural system that integrates agriculture, animal husbandry, fishing, forestry, and other agricultural sciences into a single area. So that through this integrated farming system, it is hoped that there will be a solution for increasing land productivity. The result of research conducted at KNOC, this integrated farming pattern or system has a major influence on enhancing land and agricultural output, as well as having a substantial impact on the economy of the community. This integrated farming system is also intended to become a new agricultural pattern that the community can build in order to achieve regional food security.

The integrated farming system developed by the Ngawi Organic Center Community (KNOC) is a success factor in the development of organic agriculture which is claimed to be free of residue up to 99%. The reason for the livestock pattern being employed as organic raw material is also managed in a sterile and organic manner in order to maintain the development chain. Similarly, the agricultural pattern designed is on a single piece of land, ensuring that chemical leftovers from agricultural land utilizing chemical fertilizers are not contaminated. KNOC also manufactures and distributes its organic agricultural products, which include brown rice, white rice, black rice, and organic rice bran, and claims to have penetrated Southeast Asia's export market.

In order to manage food security initiatives and promote farmers' welfare, this pattern advised to be established and turned into pilot projects for various agricultural communities or groups in East Java.

Meanwhile, Tulungagung Regency has an agricultural intensification strategy, one of which is through the development of organic agriculture. This strategy utilizes organic fertilizer management for residue-free rice yields and is based on community empowerment. This strategy was carried out by the Harapan Makmur Farmers Group Association (Gapoktan) located in Wates Village, Sumbergempol District, Tulungagung Regency.

The Harapan Makmur Gapoktan is chaired by Mr. Budiono. Mr. Budiono has many achievements, such as Exemplary Farmers of East Java Province, Recipient of Adhi Karya Pangan Nusantara 2013 from the President of the Republic of Indonesia and Delegation of the 2014 Pan Asia Farmers Conference in New Delhi India. The Harapan Makmur Gapoktan has perseverance in managing organic agriculture in Tulungagung Regency. The area of rice fields used for organic farming is 5-6 hectares.

An integrated farming technique is used in Gapoktan. Integrated farming is a farming technique that combines agriculture, animal husbandry, fishing, forestry, and other agricultural sciences. As a result, it is envisaged that this integrated agricultural system will provide a solution for enhancing land production. According to the findings of Mr. Budiono's interviews, this strategy is both helpful to the community and effective in lowering agricultural productivity. So, if all Gapoktan can build this technique to boost agricultural yields and food security in various locations, it will be highly beneficial.

Gapoktan Harapan Makmur is committed to use the system so that its agricultural products are residue free up to 99%. This is because everything is maintained organically, from animals to agricultural products. Livestock can be used as a raw material in the production

of organic fertilizers. The government assisted the Harapan Makmur Gapoktan in producing organic fertilizer. The organic fertilizer produced is able to meet the fertilizer needs for organic agricultural land and reduce costs for purchasing fertilizers. The advantage of organic fertilizer production is that it can pique the interest of more people in producing their own organic fertilizer, allowing farmers to be self-sufficient in organic fertilizer production.

In addition to fertilizers, Harapan Makmur Gapoktan also manages and distributes its organic agricultural products, such as brown rice, pith rice and brown rice. The Gapoktan also has a trademark, namely Organic Java Rice (OJaRi). This brand has also been registered with Indonesia Organic to ensure the quality of its organic agricultural products. These agricultural products have been distributed from Tulungagung Regency to outside Tulungagung Regency such as Surabaya and Malang.

The community's perspective must be changed from non-organic to organic planting patterns, which is a problem for Gapoktan in the growth of organic agriculture. This is due to variances in plant form changes, with organic rice taking longer to alter than non-organic rice. However, the selling price of organic agricultural products is higher than the selling price of non-organic products. In addition, some farmers who are not consistent with organic farming often mix chemical fertilizers. To solve this problem, Gapoktan has identified and prioritized 5-6 hectares of agricultural area for use as organic farming area, ensuring the quality of organic agricultural goods. As the initial stage in managing food security initiatives and increasing farmers' welfare, such an agricultural system must be built for agricultural organizations, particularly in East Java.

KRPL as a Model for Strengthening Consumption Patterns in Food Vulnerability Area

The three pillars of food security are inextricably linked in strengthening food security in the three research districts. Controlling agricultural land conversion, printing new agricultural land, and intensifying agricultural systems through the application of technologies that can boost productivity while maintaining environmental quality must all be done at the same time. According to field research, the lack of robustness in people's consumption patterns is largely influenced by their reliance on fewer and less diverse food items. Namely rice, this causes the guaranteed availability of food to decrease because it is strongly influenced by the climate, while the population is increasing.

With these considerations, at least an idea can be formulated for a model of strengthening people's consumption patterns. As discussed earlier, the three research districts have implemented several innovations in the food sector. These innovations are in the form of agricultural intensification and agricultural diversification. Increasing paddy field productivity through more effective and efficient methods such as SRI (System Rice Intensification) or the Mixed Farming Method, which has been used by some farming groups in the Tulungagung, Ngawi, and Magetan Regencies.

Food diversification is carried out in tandem with intensification to ensure that food security can be managed in accordance with the community's food needs. Diversification is aimed at reducing dependence on only one type of food. In the three research areas, some farming community groups have carried out diversification programs to enrich food alternatives. In the future, diversification is expected to be able to run in line with the national program, namely KRPL that already exists in the regions. In addition to reducing dependence on rice, the KRPL program is also able to improve the household economy because of the economic value in KRPL activities. No less important is the fulfillment of community nutrition. With the existence of food alternatives, the community will meet the diversity of their nutritional needs. Furthermore, this will increase the level of health and participate in the intellectual life of the nation.

Not just in the program mentioned above, but also in the community, increasing consuming patterns requires the institutionalization of norms. This development can be promoted by campaigns or counseling to encourage households to mix or replace their rice consumption with other food products that have the potential to be produced locally (Suweg, Mbothe, Tiwul, etc.). Furthermore, the government's motivation to import vast quantities of rice will be reduced. The community and the local government work together to promote various types of local food that have the potential to be produced domestically. Thus, eating does not have to be rice in order to institutionalize the paradigm of every household and community.

The strengthening of community consumption patterns must also be supported by the existence of organizations or community/farmer groups that can accommodate and implement these programs. As stated in the regulation of the Minister of Agriculture Number: 273/KPTS/ OT.164/4/2007 concerning: guidelines for fostering farmer institutions, to be fostered intensively through a dialogical approach and also used as a forum for cooperation to form a "village barn". In this case, community/farmer groups must be fostered and enhanced in order to serve as learning units, cooperative units, production units, and business units.

Conclusions

The relatively large potential for agriculture in Indonesia is a very basic reason for local governments to focus their economy on the agrarian sector. Each region certainly has economic potential that is not the same as other regions. These distinctions determine whether these potentials impede or enhance a region's competitiveness. In the context of developing regional economic potential, each region must have its own potential development plan starting from each Regency/Municipality.

Food security is considered as a sufficient supply of food that is available at all times in all places, is easy to obtain, is safe to consume, and is available at reasonable rates. Food security is a political issue at one level, in addition to having the purpose of communal

welfare. If the government fails to achieve food security, the country will be deemed vulnerable. The governments of Joko Widodo and Jusuf Kalla, predictably, included a food security agenda in the Nawacita program. The government implements a food security program with the aim of increasing food availability, developing food diversification, improving food institutions and improving food management. Various efforts have been taken by the government to achieve food security. Increasing the quality of intensification, expanding planting areas (extensification), securing production, land and water restoration and conservation, as well as partnerships between farmers and the private sector and state-owned companies are all part of these efforts.

Food security based on the concepts of independence and sustainability must be attained on a regular basis as a condition for the nation's continued existence. Efforts to achieve food security are inextricably linked to the effects of internal and external forces that are always changing. The dynamic and complexity of food security produces a variety of difficulties and challenges, as well as potentials and opportunities that must be anticipated and solved via harmonic cooperation among all parties involved in achieving food security.

The Sustainable Food House area (KRPL) is defined as an area where each household unit utilizes its yard intensively through wise management of local natural resources, which ensures the continuity of its supply while maintaining and improving its quality, value and diversity. This model has been shown to reduce monthly household spending by roughly 750,000-1.2 million dollars. The reduction was owing to the fact that KRPL items have replaced the household's demand for basic food and supplemental products. In addition, nutrition is managed because the community can choose what food to cultivate. The findings of a study by Saptana et al (2011) show that KRPL products are increasingly being used to address energy and protein needs. 17 This is further supported by evidence that all districts in East Java that have implemented the KRPL program are seeing a decrease in food insecurity.

The successful implementation of KRPL has made FAO (Food Agriculture Organization) appreciate the program for developing sustainable food housing areas (KRPL) developed by the Indonesian Ministry of Agriculture (Kementan). In fact, this program has been adopted by various countries in the world because it is able to maintain family food security. The concept of developing the Sustainable Food House Area is able to increase the food pattern of the expectations of the Indonesian people from 80 to 90.

Several conclusions can be derived from the description of KRPL implementation in the three districts, such as:

- i. *The implementation of KRPL must be managed in an integrated manner based on the needs of the local community. Community needs that are only targeted at meeting internal needs will certainly be different from people who aim to find economic value. The selection of the types of plants to be planted and the animals to be cultivated must also be carefully considered according to the geographical conditions and the nature of the KRPL location.*
- ii. *KRPL can be encouraged to expand into the rural creative economy. Especially now that Bumdes has arrived and the local finances have been allocated. According to Saptana et al (2011)'s research in Pacitan, one of KRPL's beneficial effects is the creation of local economic enterprises. Breeding, Arabic chicken egg hatching technology, production and production kiosks, agricultural product processing, and agricultural product trading are examples of these enterprises. Supporting infrastructure and funding can be established to increase impact more quickly.*
- iii. *The KRPL program can become a forum of meeting for villagers and village officials, so the good ideas will be created for the sustainability and welfare of the village.*

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